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APPENDIX: 3

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BULLETIN TITLE: Circling Instrument Approach Procedures; OpSpec C075 Revision

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1. PURPOSE. This bulletin revises Handbook guidance to clarify the circling approach maneuver authorization, operations specification (OpSpec) C075. This guidance applies to all principal operations inspectors responsible for certificate holders and operators conducting airplane operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 125, and 135.

2. BACKGROUND. Recent experience indicated that the authorization for the circling approach maneuver was not uniformly understood by the aviation industry. Aviation industry groups requested clarification of the guidance.

3. ACTION. Certificate holders and operators may be authorized in OpSpec paragraph C075, in accordance with the guidance in the attachment to this bulletin, to conduct circling approach maneuvers.

A. The attachment to this bulletin contains the revised handbook guidance for OpSpec C075 to authorize 14 CFR part 121, 135 (airplane), and 125 certificate holders to conduct circling approach maneuvers. Inspectors may insert temporary change pages 3-101 and 3-102 directly after page 3-100 of their handbook.

B. The attachment also contains a revision to the contents of 8400.10, volume 4, chapter 2, section 4, paragraph 555, subparagraph C, which was published in HBAT 00-18A. This is the general training guidance for instrument approach procedures. Inspectors may insert these pages in their handbooks using the

following procedure: Cross-out page 4-186 in the handbook. Insert temporary change pages 4-186-1 and 4-186-2 after the original page. On page 4-187, cross-out the paragraph at the top of the page before paragraph D.

C. The last 4 pages of the attachment contains a sample revision to OpSpec C075 for authorizing circling approach maneuvers for part 121, 125, and 135 airplane operations.

5. LOCATION. The attachment contains the guidance information that will be inserted at the appropriate locations in Order 8400.10. For the part 125 guidance, please refer to the guidance for instrument approaches in 8400.10. The attached sample OpSpec C075 will be incorporated into the automated operations specifications subsystem (OPSS).

6. INQUIRIES. This bulletin was developed by the AFS-200 division. Any questions regarding the guidance in this bulletin should be directed to AFS-200 at (202) 267-8166. If you need assistance in the issuance of the OpSpec paragraph C075, you may call the OPSS Hot Line at 202-267-9991.

/s/ Gary E. Davis, for
Gregory L. Michael
Manager, Air Transportation Division

Attachment

C075. CIRCLING INSTRUMENT APPROACH PROCEDURES.

A. OpSpec paragraph C075 is issued to operators who conduct 14 CFR part 121, 135, and 125 operations with fixed-wing airplanes. OpSpec C075 specifies the lowest minimums which can be used for Category I circling approach maneuvers. It also provides special limitations and provisions for instrument approach procedures at foreign airports. See volume 4, chapter 2 for more information on required training for circling maneuvers.

B. For the purpose of this OpSpec authorization, any operator issued this paragraph is authorized to conduct circle-to-land maneuvers. In any weather condition, a certificate holder that permits its pilots to accept a "circle to land" or a "circle to runway (runway number)" clearance from ATC conducts circle-to-land maneuvers. The term "circle-to-land maneuver" includes the maneuver that is referenced in various regulations, publications, and documents as "circle-to-land maneuver," "circling," "circling maneuver," "circle," "circling approach," and "circling approach maneuver." With regard to pilots, "conducting" a circle-to-land maneuver means to act as the pilot flying when a circle-to-land maneuver is being conducted.

C. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If visual reference to the airport is lost while conducting a circle-to-land maneuver the missed approach procedure specified for the applicable instrument approach must be followed, unless an alternate missed approach procedure is specified by ATC.

D. Each certificate holder who is issued OpSpec C075, and who is also required to have maneuver descriptions/procedures, must publish in its training manual, or must incorporate in its training manual by reference to another approved manual, a detailed description of the procedures used to conduct a circle-to-land maneuver. Pilots must conduct circle-to-land maneuvers using those procedures.

E. Part 121 certificate holders may conduct circle-to-land maneuvers under two separate provisions contained within OpSpec C075.

(1) *With flight training and flight checking.* Part 121 certificate holders whose pilots have been trained and checked for the circling maneuver in accordance with 14 CFR part 121, Appendix E and Appendix F, or in accordance with an Advanced Qualification Program (AQP), may conduct a circle-to-land maneuver:

- at the published circling landing minimums for the instrument approach to be used; or
- at the minimums specified in the chart contained within the OpSpec paragraph, whichever is higher.

(a) Appendix E does not require a part 121 certificate holder to train a second-in-command (SIC) in the circling maneuver if the certificate holder prohibits the SIC from performing/conducting (acting as pilot-flying) a circling maneuver. However, an SIC must be trained and can be checked in those functions specific to the circle-to-land maneuver that the SIC is required to perform while acting as pilot-not-flying.

(b) Any pilot who possesses a pilot certificate restricting circling approaches to VMC conditions is not eligible to conduct circle-to-land maneuvers except as provided in paragraph E.

(2) *Part 121 operations <u>without</u> flight training and flight checking.* Certificate holders conducting circle-to-land maneuvers without training and checking must use a Minimum Descent Altitude (MDA) of 1,000 feet (HAA) or the MDA of the published circling landing minimums for the instrument approach to be used, whichever is higher. Certificate holders that conduct a circle-to-land maneuver under this provision remain under an IFR clearance and must comply with those procedures otherwise required for circle-to-land maneuvers. Certificate holders must ensure pilots are familiar with those procedures. Part 121 pilots who have NOT been trained and checked for the circling maneuver in accordance with 14 CFR part 121, Appendices E and F, or in accordance with an Advanced Qualification Program (AQP), may conduct a circle-to-land maneuver when:

- the reported ceiling is at least 1,000 feet and the visibility is at least 3 statute miles (See part 121, Appendix E and Appendix F); OR
- the reported weather is at least equal to the published circling landing minimums for the instrument approach to be used, whichever is higher.

F. Part 125 certificate holders are not permitted to conduct circle-to-land maneuvers in airplanes without

their pilots having been checked in that maneuver.

(1) *Section 125.291 Pilot-in-Command (PIC).* Instrument proficiency check requirements, as required in subsection (c), are: "The instrument approach procedure or procedures must include at least one straight-in approach, one circling approach, and one missed approach. Each type of approach procedure demonstrated must be conducted to published minimums for that procedure."

(2) *Required part 125 SIC.* The SIC must complete the annual competency check required by section 125.287. The circle-to-land maneuver is not part of the section 125.287 competency check. However, each SIC is evaluated for flightcrew coordination.

(3) *Pilot-not-flying duties.* Each crew member can be checked in those functions specific to the circle-to-land maneuver that the pilot is required to perform while acting as pilot-not-flying.

G. Part 135 certificate holders are not permitted to conduct circle-to-land maneuvers in aircraft without their pilots having been checked in that maneuver. (Helicopter IFR circle-to-land maneuvers are authorized in OpSpec H118.)

(1) *Section 135.297 Pilot-in-Command instrument proficiency check requirements.*

(a) Section 135.297(a) does not allow "any person to serve, as pilot-in-command of an *aircraft* [emphasis added] under IFR unless, since the beginning of the 6th calendar month before that service, that pilot has passed an instrument proficiency check under this section…."

(b) Section 135.297(b) requires, "The instrument approach procedure or procedures must include at least one straight-in approach, one circling approach, and one missed approach. Each type of approach procedure demonstrated must be conducted to published minimums for that procedure." The requirement to demonstrate a circle-to-land maneuver is applicable to both airplanes and helicopters.

(c) Part 135 single-pilot and single PIC operators are not required to have training programs. However, the circle-to-land maneuver must be successfully demonstrated in every section 135.297 instrument proficiency check.

(2) In accordance with section 135.293, a part 135 IFR operator is required to ensure that each IFR SIC has an annual competency check. In accordance with Order 8400.10, Vol. III, Paragraph 539, a SIC need not be evaluated in "circling approaches" when an operator's procedures restrict an SIC from conducting (acting as pilot-flying) this event in revenue service. However, each required IFR SIC is evaluated for flightcrew coordination.

(3) *Pilot-not-flying duties.* Each pilot must be trained and can be checked in those functions specific to the circle-to-land maneuver that the pilot is required to perform while acting as pilot-not-flying.

(4) The standard of competence for part 135 instrument proficiency checks is specified in section 135.293(d). This standard is also specified in the Airline Transport Pilot Practical Test Standard (FAA-S-8081-5) and the Instrument Rating Practical Test Standard (FAA-S-8081-4).

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[PAGES 3-103 THROUGH 3-104 RESERVED]

authorized, including the equipment, training, and qualification requirements necessary for conducting the operations

- Specific and detailed operating procedures and crew duty assingments for the types of aircraft used and the instrument approach procedures authorized (These policies and procedures must require all turbojet operations to be conducted in accordance with the "stablized approach" concept.)
- Specific requirements and instructions concerning the operating restrictions and limitations associated with the types of aircraft and the instrument approach procedures to be used

C. The Operator's Training Program. Inspectors must evaluate training programs to determine that flightcrews receive both ground and flight training on the instrument approaches the operator is authorized to conduct. Because of procedural and design similarities, flight training on one type of instrument approach procedure often provides the necessary training for other types of instrument approach procedures. Inspectors observing training in progress should verify that the approved training and qualification curriculum segments ensure flightcrew competency in the conduct of authorized instrument approach procedures.

(1) *Nonprecision Approaches.* Nonprecision approaches are also referred to as approaches "other than instrument landing system (ILS), microwave landing system (MLS), and global navigation satellite system landing system (GLS)." The flightcrew qualification program of each certificate holder or operator, as applicable, must address nonprecision approaches for authorization to conduct IFR operations. Ground and flight training as well as flight checking requirements must be met in accordance with the applicable operating regulation of the certificate holder or operator.

(a) Ground training and flight training on nonprecision approaches are required for certificate holders authorized to conduct IFR operations. For part 121 operations, flightcrew ground training, flight training, and flight checking must be addressed in accordance with part 121, Appendices E and F, or the Advanced Qualification Program (AQP), as applicable.

(b) Flight training on VOR approaches satisfies flight training requirements for ILS Localizer (LOC), Simplified Directional Facility (SDF) and Localizer Descent Aid (LDA) approaches.

(c) Flight training on VOR/DME approaches satisfies flight training requirements for LOC/DME and LDA/DME approaches.

(d) Flight training on LOC back course approaches is required if the LOC back course approach is authorized.

(e) GPS instrument approaches may be credited for other equivalent types of required nonprecision approaches. However, the demonstration of any other nonprecision approaches may not be credited toward the authorization requirement to demonstrate at least one nonprecision approach utilizing GPS during the instrument check required by section 135.297 and the proficiency check required by section 121.441(a)(1).

(2) *Precision-Like Approaches.* Precision-like instrument approach procedures are those approaches providing vertical guidance that are other than ILS, MLS, and GLS.

(a) These are technically non-precision approaches but are called precision-like approaches because they provide vertical guidance. They are not precision approaches in the strict sense because they may lack the accuracy of precision approaches.

(b) Because they provide vertical guidance, precision-like approaches are to be trained using an approved method that allows descent to a published decision altitude (DA). See Order 8400.10, volume 4, chapter 2, section 4, paragraph 551, subparagraph E(1) for additional guidance.

(3) *Precision Approaches.* These approaches are those with an electronic glide slope and are referred to as ILS, MLS, and GLS approach procedures.

(a) Ground and flight training on precision approaches (ILS, MLS, and GLS approaches) is required for operators authorized to conduct precision approaches.

(b) Flight training is required on ILS approaches.

(c) Flight training on Precision Approach Radar (PAR) approaches is required, if the PAR approach is authorized.

(d) Flight training is required on MLS approaches, if the MLS approach is authorized.

(4) *Circling Approach Maneuvers (authorized in OpSpec C075).*

(a) See volume 3, chapter 1, section 5, part C, OpSpec C075 – Category I IFR Landing Minimums – Circle-To-Land Maneuver, for details on the training and checking requirements for the circling approach maneuver authorization for all certificate holders.

(b) No part 135 certificate holder authorized to conduct operations under instrument flight rules (IFR), shall use, nor may any pilot-in-command (PIC) execute a circling approach maneuver to minimums published in the instrument approach procedure for the circling approach maneuver or the minimums specified in the chart in OpSpec C075, whichever is higher - unless that PIC has, within the last 6 months, or as required by an AQP, satisfactorily demonstrated the circling approach maneuver to published minimums to an approved check airman or the Administrator.

(c) For part 121, if the operator does not provide flight training and flight checking on the circling approach maneuver in accordance with 14 CFR part 121, Appendices E and F, respectively, then the operator's General Operations Manual (GOM) and the manuals used by the flightcrews must specifically prohibit conducting circling approach maneuvers when reported weather conditions are below 1000-3 (ceiling and visibility).

(d) Ground training must include instruction on procedures to be used to ensure that missed approaches executed during a circling approach maneuver will be conducted safely.

(5) *Visual Approaches.*Ground training must include instruction on the requirements specified in the Operations Specifications for acceptance of visual approaches.

(6) Contact Approaches may be authorized by the issuance of OpSpec paragraph C076. If the certificate holder does not provide flightcrew training in accordance with OpSpec C076, then the approved operating manuals used by the certificate holder's flightcrews should explicitly prohibit the Contact Approach.

(a) Ground Training. OpSpec C076 specifies that each PIC must satisfactorily complete approved ground training before conducting a Contact Approach. That training should include the specific conditions shown in OpSpec C076 under which the PIC may request and conduct a Contact Approach.

(b) Flight Training. Inspectors should encourage realistic flight training on the Contact Approach, as that term is described in the Aeronautical Information Manual. However, if realistic flight training is not possible, inspectors should not require flight training because of possible negative training effects.

Sample Operations Specification paragraph C075, Category I IFR Landing Minimums – Circle-To-Land Approach Maneuver

The certificate holder is authorized Category (CAT) I IFR landing minimums for circle-to-land approach maneuvers in accordance with the limitations and provisions of this operations specification.

a. The lowest authorized IFR landing minimum for instrument approaches, which require a circle-to-land maneuver to the runway of intended landing, shall be determined for a particular aircraft by using the speed category appropriate to the highest speed used during the circle-to-land maneuver.

b. Aircraft operating under IFR during all circle-to-land maneuvers are required to remain clear of clouds. If visual reference to thew airport is lost while conducting a circle-to-land maneuver the missed approach procedure specified for the applicable instrument approach must be followed, unless an alternate missed approach procedure is specified by ATC.

c. All Certificate Holders- Training and Checking Provided. If the certificate holder provides training and checking the following subparagraphs c(1) through c(3) apply.

(1) The certificate holder shall use the highest of the following landing minimums for an instrument approach that requires a circle-to-land maneuver to align the aircraft with the runway of intended landing when a straight-in landing from an instrument approach is not possible or is not desirable:

(a) The circling landing minimum specified by the applicable instrument approach procedure, or

(b) A landing minimum specified in the following table.

Speed Category	HAA	Visibility in Statute Miles
Less than 91 kts	350′	1
91 to 120 kts	450′	1
121 to 140 kts	450′	1½
141 to 165 kts	550′	2
Above 165 kts	1000′	3

(2) The certificate holder shall conduct authorized circle-to-land maneuvers using only pilots who:

(a) Are not required by a pilot certificate restriction to conduct circling approaches in VMC conditions only; and,

(b) Have successfully completed an approved training program (if required) and a proficiency check for the circle-to-land maneuver. The training program must specifically include the circle-to-land maneuver. Satisfactory completion of an Advanced Qualification Program (AQP) validation of the circle-to-land maneuver satisfies this requirement.

(3) The certificate holder is authorized to use the following aircraft to conduct circle-to-land maneuvers when training and checking are provided (if none are authorized, enter N/A):

Table 1

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The following subparagraph d will be in the Part 121 and 121/135 OpSpec paragraphs only:

d. Part 121 Certificate Holders Only- When Pilot Flight Training and Flight Checking Are NOT Provided. The Part 121 certificate holder is authorized to conduct a circle-to-land maneuver without providing pilot training and checking. The following subparagraphs d(1) through d(3) shall apply:

(1) The Part 121 certificate holder is authorized to conduct a circle-to-land maneuver without providing pilot training and checking when:

(a) The reported ceiling is at least 1,000 feet and the visibility is at least 3 statute miles; or

(b) The reported weather is at least equal to the charted circling landing minimums for the approach to be used, whichever is higher.

(2) When pilot training and checking are not provided, the Part 121 certificate holder shall use a Minimum Descent Altitude (MDA) of 1,000 feet (HAA) or the MDA of the charted circling landing minimums for the approach to be used, whichever is higher.

(3) The Part 121 certificate holder is authorized to use the following aircraft to conduct circle-to-land maneuvers without providing pilot training and checking (if none are authorized, enter N/A):

Table 2

AIRCRAFT Make/Model/Series

e. If Foreign Airports are Authorized. The following special limitations and provisions for instrument approach procedures apply at foreign airports.

(1) Foreign approach lighting systems equivalent to U.S. standards are authorized for precision, precision-like (other than ILS, MLS, or GLS), and nonprecision instrument approaches. Sequenced flashing lights are not required when determining the equivalence of a foreign approach lighting system to U.S. standards.

(2) For straight-in landing minimums at foreign airports where an MDA(H) or DA(H) is not specified, the lowest authorized MDA(H) or DA(H) shall be obtained as follows:

(a) When an obstruction clearance limit (OCL) is specified, the authorized MDA(H) or DA(H) is the sum of the OCL and the touchdown zone elevation (TDZE). If the TDZE for a particular runway is not available, threshold elevation shall be used. If threshold elevation is not available, airport elevation shall be used. For approaches other than ILS, MLS, or GLS, the MDA(H) may be rounded to the next higher 10-foot increment.

(b) When an obstacle clearance altitude (OCA)/obstacle clearance height (OCH) is specified, the authorized MDA(H) or DA(H) is equal to the OCA/OCH. For approaches other than ILS, MLS, or GLS, the authorized MDA(H) may be expressed in intervals of 10 feet.

(c) The HAT or HAA used for precision approaches shall not be below those specified in subparagraph a of this operations specification.

(3) When only an OCL or an OCA/OCH is specified, visibility and/or RVR minimums appropriate to the authorized HAA/HAT values determined in accordance with subparagraph b(2) above will be established in accordance with criteria prescribed by U.S. TERPS or Joint Aviation Authorities, Joint Aviation Requirements, operational agreements, Part 1 (JAR-OPS-1).

(4) When conducting an instrument approach procedure outside the United States, the certificate holder shall not operate an aircraft below the prescribed MDA(H) or continue an approach below the DA(H), unless the aircraft is in a position from which a normal approach to the runway of intended landing can be made

and at least one of the following visual references is clearly visible to the pilot:

(a) Runway, runway markings, or runway lights.

(b) Approach light system (in accordance with 14 CFR section 91.175(c)(3)(i)).

(c) Threshold, threshold markings, or threshold lights.

(d) Touchdown zone, touchdown zone markings, or touchdown zone lights.

(e) Visual glidepath indicator (such as VASI or PAPI).

(f) Runway-end identifier lights.

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